

NOvA Electronics  
APD carrier board specification  
12-Aug-05  
J. Oliver

Feature	English	Metric
Material	G10/FR4	
Board type	Double sided	
Nominal thickness	0.063"	1.6 mm
Thickness tolerance [ <sup>1</sup> ]	+/- 4 mil	+/- 100u
Production thickness uniformity [ <sup>2</sup> ]	+/- 1.5 mil	+/- 40u
Flatness [ <sup>3</sup> ]	+/- 1 mil	+/- 25u
Tolerance on internal routing slots [ <sup>4</sup> ]	+/- 4 mil	+/- 100u
Bump bond pad dimensions	6 mil square	150u square
Bump bond pad plating	> 20 μ" Au on >200 μ" Ni [ <sup>5</sup> ]	>0.5u <b>Au</b> on >5u <b>Ni</b>

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<sup>1</sup> Tolerance on initial choice of material as measured from copper to copper on un-printed board.

<sup>2</sup> Tolerance on deviation of delivered prototype and production boards from initial choice of material

<sup>3</sup> Flatness tolerance to be measured at the bond pad pattern, approximately 15mm square.

<sup>4</sup> Tolerance with respect to bond pad pattern

<sup>5</sup> μ" : micro-inches